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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,792	05/13/2002	Philippe Schottland	GEPL.P-051	1633
43247	7590	04/05/2005	EXAMINER	
OPPEDAHL & LARSON LLP - LEXAN			PATTERSON, MARC A	
PO BOX 5068			ART UNIT	
DILLON, CO 80435			PAPER NUMBER	

1772

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/063,792

Applicant(s)

SCHOTTLAND, PHILIPPE

Examiner

Marc A Patterson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 28-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 28-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/25/02.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

#### WITHDRAWN REJECTIONS

1. The 35 U.S.C. 103(a) rejection of Claims 1 – 10, 13 – 23 and 28 – 39 as being unpatentable over Kozak et al (U.S. Patent No. 5,660,497) in view of Cornell et al (U.S. Patent No. 3,873,390) and Robinson (U.S. Patent No. 5,086,937), of record on page 2 of the previous Action, is withdrawn.
2. The 35 U.S.C. 103(a) rejection of Claims 11 – 12 and 40 – 41 as being unpatentable over Kozak et al (U.S. Patent No. 5,660,497) in view of Cornell et al (U.S. Patent No. 3,873,390) and Robinson (U.S. Patent No. 5,086,937) and further in view of Lee (U.S. Patent No. 5,066,580), of record on page 5 of the previous Action, is withdrawn.

#### NEW REJECTIONS

##### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1 – 10, 13 – 23 and 28 – 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozak et al (U.S. Patent No. 5,660,497) in view of Cornell et al (U.S. Patent No. 3,873,390) and Spohr (European Patent No. 1,059,237).

With regard to Claims 1 and 28 – 29, Kozak et al disclose an article (sign; column 4, lines 30 – 31) comprising a molded body (column 7, lines 32 – 34) formed from a plastic composition having an index of refraction of 1.6 (column 4, lines 50 – 51) and a fluorescent material (fluorescent glass, therefore photoluminescent and having a fluorescent dye; column 4, lines 23 – 25) wherein the article has a graphic image (shape; column 4, line 36) formed as protrusions on a surface thereof (the reflection of the image is enhanced by providing spheres which are embedded half – way in the medium comprising the sign and therefore are protruding from the medium; column 4, lines 63 – 66) and therefore provide a luminescent visual effect in the shape of the graphic image. Kozak et al fail to disclose an article in the form of a bottle having an annular portion and comprising a bottle having a bottom and a sealable top portion and an integrally molded handle.

Cornell et al teach that signs and labels are equivalent as photoluminescent articles (photoluminescent films are used interchangeably in both applications; column 1, lines 50 – 51) for the purpose of obtaining articles having long glow life (column 1, lines 60 – 61). Spohr teaches the application of a label (column 4, lines 22 – 24) to a bottle (column 4, lines 22 – 24) having a sealable top portion (cap; column 2, lines 48 – 50) and annular body portion (cylindrical in cross section; column 3, lines 6 – 9) and integrally molded handle (column 1, lines 37 – 40) for the purpose of forming a complete container (complete package; column 4, lines 22 – 24). One of ordinary skill in the art would therefore have recognized the advantage of providing for the label of Cornell et al in Kozak et al depending on the desired glow life of the end product as taught by Cornell et al, and of providing for the label of Kozak et al and Cornell et al to the labeled bottle of Spohr, thus obtaining an article having a substantially annular body

portion and comprising a bottle having a bottom and a sealable top portion and an integrally molded handle, depending on the desired completeness of the container as taught by Spohr.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a label in Kozak et al in order to obtain an article having a long glow life as taught by Cornell et al and to have provided for a labeled bottle in Kozak et al in order to obtain a complete container as taught by Spohr, thus obtaining an article in the form of a bottle, the label, having a graphic image as a result of the photoluminescent material that is part of the plastic composition.

With regard to Claims 2, 9, 22, 30 and 32, the fluorescent material disclosed by Kozak et al comprises an organic fluorescent dye comprising xanthene (pigment comprising xanthene; column 7, lines 24 – 26).

With regard to Claims 3 – 8, 10, 16 – 21, 23 and 33 – 38, Kozak et al fail to disclose a dye having a concentration of 0.1% to 0.005% and 0.0001 to 0.0003% by weight and a dye providing a red or blue visual effect and a photoluminescent material comprising a material of nanosize. However, Kozak et al disclose a fluorescent dye having a concentration of at least a fraction of 1% fluorescent dye (the material comprises fluorescent dye; column 7, lines 24 – 26) and particle size of 2 mm (column 9, lines 44 – 45) and teaches the selection of concentration and color of the dye (column 6, line 41) based on workability and cost (column 6, line 37). Therefore one of ordinary skill in the art would have recognized the utility of varying the concentration and color and particle size of the dye to obtain a desired workability and cost. Therefore, the workability and cost would be readily determined through routine optimization of

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concentration and color and particle size of the dye by one having ordinary skill in the art depending on the desired end use of the product.

It therefore would be obvious for one of ordinary skill in the art to vary the concentration and color and particle size of the dye in order to obtain a desired workability and cost, since the workability and cost would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Kozak et al.

With regard to Claims 14 – 15, and 31, the plastic disclosed by Kozak et al is polycarbonate (column 7, lines 31 – 32).

With regard to Claims 13 and 39, the images disclosed by Kozak et al are formed from protrusions having a height of 1 mm (the spheres are beads having a diameter of 2 mm; column 9, lines 44 – 45).

5. Claims 11 – 12 and 40 – 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozak et al (U.S. Patent No. 5,660,497) in view of Cornell et al (U.S. Patent No. 3,873,390) and Spohr (European Patent No. 1,059,237) and further in view of Lee (U.S. Patent No. 5,066,580).

Kozak et al, Cornell et al and Spohr disclose an article comprising xanthene as discussed above. With regard to Claims 11 – 12 and 40 – 41, Kozak et al fail to disclose xanthene having a quantum yield of 0.9 or greater. However, Lee teaches that xanthene has a quantum yield of 0.93 (column 1, line 24). A quantum yield of greater than 0.9 or greater is therefore inherent to Kozak et al, Cornell et al and Spohr.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497.

The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Marc Patterson 4/4/05*  
Marc A. Patterson, PhD.  
Examiner  
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